

IN THE CLAIMS

1. (currently amended) A method for controlling operation of a gas turbine engine using a rotor protection system to prevent a rotor from operating at a speed greater than a pre-set operational maximum speed, the engine including a fuel metering system including a fuel metering valve and a fuel bypass valve, a low pressure drain in flow communication with the fuel metering system, the rotor protection system including a servovalve coupled to the fuel metering system and a the fuel bypass valve, said method comprising the steps of:

supplying fuel to the engine through the fuel metering valve and the a fuel shutoff valve; and

controlling fuel to the engine with the servovalve if the fuel metering valve becomes inoperable by diverting a portion of the fuel flowing to the metering valve through the fuel bypass valve when an overspeed condition is detected.

2. (cancelled)

3. (currently amended) A method in accordance with Claim 1 wherein the engine further includes a low pressure drain and a restrictor orifice in flow communication with the fuel metering system, said step of controlling fuel flow further comprises the step of opening the fuel bypass valve such that a portion of the fuel flowing from the metering valve is diverted through the fuel bypass valve.

4. (original) A method in accordance with Claim 1 wherein said step of controlling fuel flow further comprises the step of controlling fuel flow to the engine with the servovalve independently of the fuel metering valve.

5. (original) A method in accordance with Claim 1 wherein the engine further includes a shutoff solenoid valve coupled to the servovalve, said step of controlling fuel flow further comprises the step of stopping fuel flow to the engine with the shutoff solenoid valve.

6-19. (cancelled)

20. (new) A method for controlling operation of a gas turbine engine using a rotor protection system to prevent a rotor from operating at a speed greater than a pre-set operational maximum speed, the engine including a fuel metering system including a fuel metering valve and a fuel bypass valve, a low pressure drain and a restrictor orifice in flow communication with the fuel metering system, the rotor protection system including a servovalve coupled to the fuel metering system and the fuel bypass valve, said method comprising the steps of:

supplying fuel to the engine through the fuel metering valve and a fuel shutoff valve; and

controlling fuel to the engine with the servovalve if the fuel metering valve becomes inoperable by opening the fuel bypass valve such that a portion of the fuel flowing from the metering valve is diverted through the fuel bypass valve.

21. (new) A method in accordance with Claim 20 wherein said step of controlling fuel flow further comprises the step of controlling fuel flow to the engine with the servovalve independently of the fuel metering valve.

22. (new) A method in accordance with Claim 20 wherein the engine further includes a shutoff solenoid valve coupled to the servovalve, said step of controlling fuel flow further comprises the step of stopping fuel flow to the engine with the shutoff solenoid valve.